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REMARKS

This document is intended as a full and complete response to the Office Action dated July 15, 2004. In the Office Action, the Examiner has indicated that claims 1-21 are pending, of which claims 15-18 are withdrawn from consideration, and claims 1-14 and 19-21 stand rejected.

By this response, claims 15-18 are affirmed as being non-elected subject matter and withdrawn from consideration, claim 12 is canceled, and claims 1-11, 13-14, and 19-21 continue unamended.

ELECTION/RESTRICTIONS

The Examiner has indicated that claims 15-18 have been withdrawn for further consideration. The Applicants affirm that claims 1-14 drawn to computer-to-computer data streaming (Group I) are elected for examination henceforth, and claims 15-18 are to be considered withdrawn for further consideration.

To the extent this restriction requirement is maintained by the Examiner, the Applicant reserves the right to subsequently file divisional applications in order to prosecute the inventions recited in any one or more of the non-elected groups of claims.

Rejections Under 35 U.S.C. § 102

Claims 1-7, 9-14, and 19-21

The Examiner has rejected claims 1-7, 9-14, and 19-21 under 35 U.S.C. § 102 as being anticipated by Wolf et al. (US patent 6,463,508, issued October 8, 2002, hereinafter "Wolf"). The Applicants respectfully traverse the rejection.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)(citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). The Wolf

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reference fails to disclose each and every element of the claimed invention, as arranged in the claim.

The Applicants' claimed invention, as recited in independent claim 1 (and similarly independent claims 13 and 19) recites:

"In a network, a method for segmenting a streaming multimedia clip into a plurality of sequentially organized data segments of exponentially increasing size and distributing said streaming multimedia clip from an origin server to a plurality of streaming caches which comprise a distribution set in said network, the method comprising the steps of:

determining a size (L) of the multimedia clip;
segmenting the streaming multimedia clip into a plurality of data segments of exponentially increasing size; and
distributing the plurality of data segments from the origin server to said plurality of streaming caches, wherein an i-th data segment is distributed in an i-th distribution round to each of said plurality of streaming caches." (emphasis added).

The Applicants' invention segments a streaming media clip into a plurality of data segments of exponentially increasing size, and distributes the plurality of data segments from the origin server to the plurality of streaming caches, wherein an i-th data segment is distributed in an i-th distributor round to each of said plurality streaming caches. In other words, the Applicants' invention streams distributes the plurality of data segments to each of the plurality of streaming caches.

By contrast, the Wolf reference discloses "the primary idea of cache admission control is to permit only segments from media objects which are popular enough to enter the cache. Preferably, the admission process applies different criterion to the different segments from the same media object with the basic consideration being the distance of a segment from the beginning of the media object, i.e., its segment number. As mentioned herein, the beginning segments of an object have a critical impact on the initial delay to start the video. If cached, the video may be streamed immediately to the requesters. The later segments, if not cached, may be prefetched after the request is received." (see Wolf, Col. 6, Lines 8-19).

The Applicants' invention is different from the teachings of the Wolf reference since the Applicants' invention distributes the plurality of data segments across the

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plurality of cache servers, as opposed to the Wolf reference that merely discloses storing a plurality of data segments of differing sizes at a single cache server. Since the Wolf reference fails to teach, or even suggest, "distributing the plurality of data segments from the origin server to said plurality of streaming caches, wherein an i-th data segment is distributed and i-th distribution round to each of said plurality streaming caches," the Wolf reference fails to teach each and every element of the claimed invention, as arranged in the claim.

As such, the Applicants submit that independent claim 1 is not anticipated and fully satisfies the requirement of the 35 U.S.C. §102 and is patentable thereunder. Furthermore, independent claims 13 and 19 recite similar features as recited in independent claim 1. As such and for at least the same reasons discussed above, the Applicants submit that these independent claims are also not anticipated and fully satisfy the requirements of the 35 U.S.C. §102 and are patentable thereunder. Moreover, claims 2-11, 14, and 20-21 depend, either directly or indirectly, from independent claims 1, 13 and 19 and recite additional features thereof. As such and for at least the same reasons discussed above, the applicants submit that these dependent claims are also not anticipated and fully satisfy the requirements of the 35 U.S.C. §102 and are patentable thereunder. Therefore the Applicants respectfully request that the rejection be withdrawn.

Rejections Under 35 U.S.C. § 103

Claim 8

The Examiner has rejected claim 8 under 35 U.S.C. § 103 as being obvious over Wolf et al. (US patent 6,463,508, issued October 8, 2002, hereinafter "Wolf") in view of Eberman et al (US patent 6,173,287, issued January 9, 2001, hereinafter "Eberman"). The Applicants respectfully traverse the rejection.

The test under 35 U.S.C. § 103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Thus, it is impermissible to focus either on the "gist" or "core" of the invention, Bausch & Lomb, 295928_1.DOC

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Inc. v. Barnes-Hind/Hydrocurve, Inc., 230 USPQ 416, 420 (Fed. Cir. 1986) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added).

Claim 8 depends from independent claim 1 and recites additional features thereof. In particular, claim 8 recites in part:

"In a network, a method for segmenting a streaming multimedia clip into a plurality of sequentially organized data segments of exponentially increasing size and distributing said streaming multimedia clip from an origin server to a plurality of streaming caches which comprise a distribution set in said network, the method comprising the steps of:

determining a size (L) of the multimedia clip;
 segmenting the streaming multimedia clip into a plurality of data segments of exponentially increasing size; and
distributing the plurality of data segments from the origin server to said plurality of streaming caches, wherein an i-th data segment is distributed in an i-th distribution round to each of said plurality of streaming caches." (emphasis added).

As discussed above, the Wolf reference merely discloses selectively storing a plurality of segmented information of different sizes at a single cache server. Nowhere in the Wolf references is there any teaching or suggestion of "distributing the plurality of data segments from the origin server to said plurality of stream caches, wherein an i-th data segment is distributed and an i-th distribution round to each of said plurality streaming caches."

Furthermore, the Eberman reference fails to bridge a substantial gap as between the Wolf reference and the Applicants' invention. In particular, Eberman discloses "the present invention modifies the above-described technique by letting $h[i]$ be a valid starting location within an audio/video stream, and letting $L[q,j]$ be the jth location of the query word q in the audio/video stream. Then the score at valid starting location $h[i]$ can be given by

$$score(h[i]) = \sum_{\{L[q,j] \geq h[i][q]\}} \exp(-L[q,j] - h[i]) / DELTA$$

wherein DELTA is a settable distance weight equal to 10-30 seconds" (see Eberman, Col. 21, Lines 59-67).

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Even if the two references could somehow be operably combined, the combination would merely disclose segmenting a multimedia clip into a plurality of data segments of exponentially increasing size, distributing the plurality of data segments from a content server to a single cache server, and a DELTA is a settable distance weight equal to ten to thirty seconds. Since the combination of Wolf and Eberman fails to teach or suggest "distributing the plurality of data segments from the origin server to said plurality of said streaming caches wherein an i-th data segment is distributed in an i-th distribution round to each of said plurality of streaming caches," the combined references fail to teach or suggest the Applicants' invention as a whole.

As such, the Applicants' submit that dependent claim 8 is not obvious and fully satisfies the requirements of the 35 U.S.C. §103 and is patentable thereunder. Therefore the Applicants respectfully request that the rejection be withdrawn.

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Conclusion

Thus, the Applicants submit that the pending claims are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Eamon Wall or Steven M. Hertzberg at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

9/8/04

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